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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/673,813	09/29/2003	Marc-David Cohen	343355600039	2215

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10/04/2006

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EXAMINER

BEKERMANN, MICHAEL

ART UNIT

PAPER NUMBER

3622

DATE MAILED: 10/04/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/673,813	Applicant(s) COHEN, MARC-DAVID	
	Examiner Michael Bekerman	Art Unit 3622	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12 June 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-16, 18-23 and 25-34 is/are pending in the application.
- 4a) Of the above claim(s) 14 and 24 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-16, 18-23, and 25-34 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date <u>9-29-03, 11-24-03, 6-12-06, 8-24-06, 9-18-06</u> | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Election/Restrictions

1. Claims 17 and 24 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected embodiment, there being no allowable generic or linking claim. Election was made **without** traverse in the reply filed on 6/12/2006.

Information Disclosure Statement

1. The information disclosure statement filed 9/29/2003 fails to comply with the provisions of 37 CFR 1.97, 1.98 and MPEP § 609 because no copies of the foreign references have been provided. It has been placed in the application file, but the foreign document information referred to therein has not been considered as to the merits. Applicant is advised that the date of any re-submission of any item of information contained in this information disclosure statement or the submission of any missing element(s) will be the date of submission for purposes of determining compliance with the requirements based on the time of filing the statement, including all certification requirements for statements under 37 CFR 1.97(e). See MPEP § 609.05(a).

Claim Objections

2. Claims 27-30 are objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim.

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Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form. The subject matter recited in these claims is considered to be intended use. Therefore, it fails to limit the parent claim.

3. Claim 32 is objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim.

Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form. This claim mixes statutory classes and fails the infringement test in MPEP 608.01(n) as being an improper dependant claim. A CD-ROM having instructions to perform the method step would infringe claim 32, but not the method claim since the CD-ROM itself only stores steps, it does not perform them. Mere possession of such a CD-ROM would infringe claim 10, but not the associated method claim.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claims 1, 10, 18, 22, 25, 33 and 34 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding claims 1, 18, 33, and 34, these claims recite the limitations “substantially optimizing” and “substantially maximizes”. These limitations are unclear. To what degree does the optimization or maximization occur? The word substantially is not definitive.

Regarding claim 10, this claim recites the limitation “raw data for each customer may include the likelihood”. It is unclear as to whether an inclusion actually happens, or if it only “may” happen.

Regarding claim 18, this claim recites the limitation “the objective function”. This is unclear. This refers to the objective function of what?

Regarding claim 22, this claim recites the limitations “approximate optimal item” and “assignments are approximately optimal”. These limitations are unclear. Are they optimal or aren’t they optimal? If it is an approximate calculation, to what degree are they optimal?

Regarding claim 25, this claim recites the limitation “the determination...enhances long term value of the customer”. It is unclear how this method can guarantee that a customer’s long term value will be enhanced by performing this method.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

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5. **Claims 1, 3-16, 18-23, and 25-34 are rejected under 35 U.S.C. 102(b) as being anticipated by Hollander (Hollander, Geoffrey, "Model1 deftly parses customer characteristics (Version 2.1 of Group1 Software's data mining software) (Software Review) (Evaluation)", InfoWorld, v20, n21, p148, May 25, 1998).**

Hollander teaches a system and method for the targeting and offering of items to individuals that includes all of the limitations recited in the above claims.

Regarding claims 1, 19, 25, and 31-34, Hollander teaches receiving purchase information (offer-acceptance data) for individuals (Paragraph 0010, Sentence 1), creating aggregations of individuals based upon degree of similarity (segmenting) (Paragraph 0013, Sentence 1), and performing a mathematical optimization upon the aggregation and identifying through the optimization the proportion within an aggregation to offer an item to (Paragraph 0010).

Regarding claims 3-5, Hollander teaches targeted to groups of individual people. Hollander targets to existing customers (in which history data is collected). Each time an optimization and targeting is performed, the targeted customer is a potential customer.

Regarding claims 6 and 7, Hollander teaches the items as being products and services (Paragraph 0010, Sentence 2).

Regarding claim 8, Hollander teaches data-mining (Paragraph 0003).

Regarding claims 9 and 10, Hollander teaches the estimating of expected returns (maximizing profits) for cross-sell opportunities across multiple items (Paragraph 0010, Sentences 3-4).

Regarding claims 11 and 18, Hollander teaches aggregation factors as comprising expected profit (maximizing profit) (Paragraph 0010, Sentence 4). To maximize profit, costs must inherently be taken into account.

Regarding claims 12 and 20, Hollander teaches using linear regression for the mathematical optimization (Paragraph 0016).

Regarding claims 13-16, Hollander teaches aggregation and segment constraints (Paragraph 0013), item constraints (modeling based on particular products) (Paragraph 0010, Sentence 1), and budget constraints (meeting a budget) (Paragraph 0010, Sentence 4).

Regarding claim 21, multiple customers are targeted and aggregated into segments (Paragraphs 0009-0010). This is considered a continuous variable.

Regarding claim 22, customers are disaggregated using identified proportions of aggregation individuals (Paragraphs 0011-0013).

Regarding claim 23, the maximization of profit reads on the greedy algorithm (Paragraph 0010, Sentence 4).

Regarding claim 26, Hollander handles multiple products and services, and this is considered to read on offering over multiple events.

Regarding claims 27-30, these claims are considered to be intended use, and do not further limit the parent claims.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. **Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hollander (Hollander, Geoffrey, "Model1 deftly parses customer characteristics (Version 2.1 of Group1 Software's data mining software) (Software Review) (Evaluation)", InfoWorld, v20, n21, p148, May 25, 1998).**

Regarding claim 2, which introduces the specific data content of the individual, it could be argued that Hollander does not teach such data content. However these differences are only found in the nonfunctional descriptive material and are not functionally involved in the method (or structurally programmed) steps recited. The steps would be performed the same regardless of data content. Thus, this descriptive material will not distinguish the claimed invention from the prior art in terms of Patentability, see *In re Gulack*, 703 F.2d 1381, 217 USPQ 401, 404 (Fed. Cir. 1983); *In re Lowry*, 32 F.3d 1579, 32 USPQ2d 1031 (Fed. Cir. 1994). Therefore, it would have been obvious to one of ordinary skill at the time of the invention to have included any type of individual. Such data content does not functionally relate to the steps and the subjective interpretation of the data content does not patentably distinguish the claimed invention.

Conclusion

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

The following references are cited to further show the state of the art with respect to optimization of cross-selling campaigns:

WO 01/11522 to Galperin

U.S. Patent No. 6,078,892 to Anderson

U.S. Patent No. 6,029,139 to Cunningham

U.S. Pub No. 2003/0208402 to Bibelnicks

U.S. Pub No. 2003/0110072 to Delurgio

U.S. Pub No. 2002/0116237 to Cohen

U.S. Pub No. 2001/0014868 to Herz


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael Bekerman whose telephone number is (571) 272-3256. The examiner can normally be reached on Monday - Friday, 7:30 - 4:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Eric W. Stamber can be reached on (571) 272-6724. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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JEFFREY D. CARLSON
PRIMARY EXAMINER